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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/596,966

Applicant(s)

SATO, HIDEO

Examiner

QUANG PHAM

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Respond to Applicant's Arguments/Remarks

1. Applicant's arguments, see Remarks, filed 11/23/2010, with respect to the rejections of **claims 1-2, 4-6, and 9-10** under 35 USC 103(a) (over **Yap** in view of **Kono** and further in view of **Bridgelall**), **claim 3** under 35 USC 103(a) (over **Yap** in view of **Kono**, **Bridgelall** and further in view of **Benhammou**), **claim 7** under 35 USC 103(a) (over **Yap** in view of **Kono**, **Bridgelall** and further in view of **Endoh** and **Bromer**), **claim 11** under 35 USC 103(a) (over **Yap** in view of **Kono**, **Bridgelall**, **Endoh** and further in view of **Lemelson**), and **claim 12** under 35 USC 103(a) (over **Yap** in view of **Kono**, **Bridgelall** and further in view of **Bromer**), based solely on the claimed limitations as amended, has been fully considered and are not deemed persuasive.

On the Applicant's remarks page 3, the Applicant indicated the cancellation of **claim 3**. Therefore, due to the claimed amendments, upon further consideration, a new ground of rejections necessity by amendments is made in view of following reference/combinations.

Examiner Notes

2. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-2, 4-6, and 9-10 are rejected under 35 USC 103(a) as being unpatentable over Yap et al. (Yap – US 6,111,506) in view of Kono et al. (Kono – US 6,813,010 B2), Bridgelall (Bridgelall – US 6,672,512 B2) and further in view of You et al. (You – US 2005/0010769 A1).**

(1). As to **claim 1**, **Yap** discloses method of making an improved security identification document including contactless communication insert unit. Further, **Yap** discloses an information processing system comprising:

(1) a first information processing apparatus (FIG. 7 the improved security document 10) and a second information processing apparatus (FIG. 7 the improved security identification document interface unit 62), said first information processing apparatus comprising (a) a storage (column 4 line 64 – column 5 line 6, column 12 lines 39-42 and FIG. 1; the microprocessor 14 function that would access memory/storage) means which stores a first biological identification data associated with a predetermined portion of a subject's living body (column 4 lines 38-53 and column 6 lines 45-51) and (b) a first communication means for performing communication when held proximate to the predetermined portion of the subject's living body (column 15 lines 6-13, column 15 lines 31-37, column 5 line 64 – column 6 line 16),

said second information processing apparatus (FIG. 7 the improved security identification document interface unit 62) comprising (a) a biological sensor (FIG. 7 the biometric data input device 72) which detects biological information from the subject's living body (column 15 lines 38-52 and FIG. 7); (b) a second communication means which communicates with the first communication means (column 15 lines 20-37); (2) a biological authentication means which performs biological authentication (column 15 lines 56-65 and column 16 lines 6-11), based on the second biological identification data (column 15 lines 38-52 and FIG. 7) and on the first biological identification data (column 4 lines 38-53 and column 6 lines 45-51).

Except for the claimed limitations of (1)(c) an extraction means which extracts a second biological identification data from the biological information detected by the biological sensor while the first communication means transmits the first biological information to the second communication means; (3) a network connected to the second information processing apparatus; and (4) an authentication device connected to the network that performs mutual authentication between the first information processing apparatus via the second information processing apparatus and a management server via the network, wherein, if mutual authentication is confirmed by the authentication device, the first information processing apparatus and the second information processing apparatus exchange encryption information.

In **Yap's** teaching, it would have been obvious to one skilled in the art at the time of the claimed invention that the user of the security identification document would/could well be using his/her hand to present the card for reading (inspected or validated proximate to or equipped on a predetermined portion of the subject's living body) and the same hand be used for scanning the biometric identification data (finger print scanning) for verification, for user convenience.

In the art of performing personal identification, **Kono** discloses a personal identification system wherein the system comprises a camera having a light source used to capture the person's blood vessel pattern, and the captured image is processed to extract identification data from the captured image (column 2, line 68 – column 3 lines 21 and FIG. 11 steps 1004-1103). Further, **Kono** discloses a personal identification system wherein the registered biological data is stored in the database during the registration (column 5 lines 15-17, lines 22-27 and FIG. 10 steps 1000-1001 and database 100). During the authentication process, the biological data obtained from the user using the imaging device (column 2 line 68 – column 3 lines 21, column 5 lines 14-42, FIG. 3A, FIG. 4, FIG. 7-9, FIG. 10 step 1003, and FIG. 11 steps 1004-1103) is compared to the registered biological data selected from the database (column 5 lines 17-21, lines 27-42 and FIG. 10 steps 1002-1010).

In the art of performing personal identification, **Bridgelall** discloses a system/method for a combined biometric reader (column 3 lines 56 – column 4 lines 9, column 6 lines 33-52, and FIG. 1 the barcode scanner 102 and the laser detection device 104) and RFID circuit (FIG. 1 the RFID circuit 106) to read the information from the RFID badge and finger print for authentication (column 3 lines 40-55, column 4 lines 62 – column 5 lines 12, and column 6 lines 33-52). Further, **Bridgelall** discloses the system can simultaneously process the biometric data signals and the RFID signals (abstract, column 4 lines 62 – column 5 lines 12, column 5 lines 56-62, column 6 lines 33-52, and FIG. 1).

In the same art of exchanging information between two devices, **You** discloses the known method of exchanging contents between two devices in wireless communication wherein the first device (FIG. 1 the device A) and the second device (FIG. 1 the device B) confirm whether each

of the first and second devices are authentic through the mutual authentication (FIG. 1 the mutual authentication 120). Further, **You** discloses if the mutual authentication is confirmed that both of the first and second devices are authentic, the first device and the second device exchange the key used to encrypt/decrypt the content of information during transmitting/receiving between the two devices through the session key exchange process ([0005] and FIG. 1 the session key exchange 130 and content exchange 140).

In view of the teachings by **Yap, Kono, Bridgelall**, and **You's** teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include an extraction means which extracts a second biological identification data from the biological information detected by the biological sensor, as taught by **Kono**, while the first communication means transmits the first biological information to the second communication means, as taught by **Bridgelall**, in the personal identification system of **Yap**, for the purpose of identifying the captured biological data before performing the biological authentication process in a speedy, therefore convenient manner to the user, further to include in the computer of personal identification system of **Yap, Kono, and Bridgelall** connected the network connected to retrieve biological information of the user from the database wherein the improved security identification document and computer connected to the network perform the mutual authentication before the improved security identification document and the computer of the system exchanging the encryption information for performing the biological authentication, as taught by **You**, in the personal identification system of **Yap, Kono, and Bridgelall**, for the purpose of authenticating each other between the improved security identification document and the system before the improved security identification document transmitting the biological information to the system

and the result would have been predictable in the combination of **Yap, Kono, Bridgelall, and You.**

(2). As to **claim 2, Yap** discloses method of making an improved security identification document including contactless communication insert unit. Further, **Yap** discloses an information processing apparatus comprising:

- a biological sensor (FIG. 7 the biometric data input device 72) which detects biological information from a living body (column 15 lines 38-52 and FIG. 7) when held proximate to a predetermined position of the living body;

- a communication target which stores biological identification data (column 4 lines 38-53, column 6 lines 45-51, and FIG. 7 the improved security document 10);

- a near-distance communication means which communicates with the communication target (column 5 lines 64 – column 6 lines 16, column 15 lines 6-11, and FIG. 7 the improved security document 10 as communication target).

Except for the claimed limitations of an extraction means which extracts biological identification data from the biological information detected by the biological sensor while the communication target transmits the stored biological identification data to the second communication means; a biological authentication means which compares the stored biological identification data with the detected biological identification data; a network connected to the near distance communication means; and an authentication device connected to the network that performs mutual authentication between the communication target via the near-distance communication means and a management server connected to the network, wherein, if mutual

authentication is confirmed by the authentication device, the communication target and the near distance communication means exchange encryption information.

In **Yap's** teaching, it would have been obvious one skilled in the art that the user of the security identification document would/could well be using his/her hand to present the card for reading (inspected or validated proximate to or equipped on a predetermined portion of the subject's living body) and the same hand be used for scanning the biometric identification data (finger print scanning) for verification, for user convenience.

In the art of performing personal identification, **Kono** discloses a personal identification system wherein the system comprises a camera having a light source used to capture the person blood vessel pattern when the user fingers exposed to the light source, and the captured image is processed to identify the captured data (column 2 line 67 – column 3 lines 21, lines 36-40, FIG. 3A, FIG. 4, FIG. 7-9, and FIG. 11 steps 1004-1103).

In the art of performing personal identification, **Bridgelall** discloses a system/method combined biometric reader (column 3 lines 56 – column 4 lines 9, column 6 lines 33-52, and FIG. 1 the barcode scanner 102 and the laser detection device 104) and RFID circuit (FIG. 1 the RFID circuit 106) to read the information from the RFID badge and finger print for authentication (column 3 lines 40-55, column 4 lines 62 – column 5 lines 12, and column 6 lines 33-52). Further, **Bridgelall** discloses system can simultaneously process the biometric data signals and the RFID signals (abstract, column 4 lines 62 – column 5 lines 12, column 5 lines 56-62, column 6 lines 33-52, and FIG. 1).

In the same art of exchanging information between two devices, **You** discloses the known method of exchanging contents between two devices in wireless communication wherein the first

device (FIG. 1 the device A) and the second device (FIG. 1 the device B) confirm whether each of the first and second devices are authentic through the mutual authentication (FIG. 1 the mutual authentication 120). Further, **You** discloses if the mutual authentication is confirmed that both of the first and second devices are authentic, the first device and the second device exchange the key used to encrypt/decrypt the content of information during transmitting/receiving between the two devices through the session key exchange process ([0005] and FIG. 1 the session key exchange 130 and content exchange 140).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include an extraction means which extracts biological identification data from the biological information detected by the biological sensor, as taught by **Kono**, while the communication target transmits the stored biological identification data to the second communication means, as taught by **Bridgelall**, and a biological authentication means which compares the stored biological identification data with the detected biological identification data, as taught by **Kono**, in the personal identification system of **Yap**, for the purpose of identifying the captured biological data before performing the biological authentication process, further to include in the computer of personal identification system of **Yap**, **Kono**, and **Bridgelall** connected the network connected to retrieve biological information of the user from the database wherein the improved security identification document and computer connected to the network perform the mutual authentication before the improved security identification document and the computer of the system exchanging the encryption information for performing the biological authentication, as taught by **You**, in the personal identification system of **Yap**, **Kono**, and **Bridgelall**, for the purpose of authenticating each other between the improved security

identification document and the system before the improved security identification document transmitting the biological information to the system and the result would have been predictable in the combination of **Yap, Kono, Bridgelall, and You**.

(3). As to **claim 4, Yap, Kono, Bridgelall, and You** disclose the limitations of **claim 2** except for the claimed limitations of the information processing apparatus further comprising network communication means which communicates with a management server which manages the biological identification data registered in the communication target, establishing a correspondence thereof, wherein, the biological authentication means compares mutually one another of the biological data at the predetermined portion, extracted by the extraction means, the biological identification data obtained from the management server via the network communication means, and the biological identification data obtained from the communication target via the near-distance communication means.

In the art of performing personal identification, **Kono** discloses a personal identification system wherein the system comprises network communication means which communicates with a management server which manages the biological identification data registered in the communication target (column 5 lines 15-17, lines 22-27 and FIG. 10 steps 1000-1001 and database 100), establishing a correspondence thereof, wherein the biological authentication means compares mutually one another of the biological data at the predetermined portion (column 5 lines 27 – 42 and FIG. 10 steps 1002-1010), extracted by the extraction means, the biological identification data obtained from the management server via the network communication means (column 2 line 68 – column 3 lines 21 , column 5 lines 14-42, FIG. 10 step 1003, and FIG. 11 steps 1004-1103).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the information processing apparatus further comprising network communication means which communicates with a management server which manages the biological identification data registered in the communication target, establishing a correspondence thereof, wherein the biological authentication means compares mutually one another of the biological data at the predetermined portion, extracted by the extraction means, the biological identification data obtained from the management server via the network communication means, and the biological identification data obtained from the communication target via the near-distance communication means, as taught by **Kono**, in the personal identification system of **Yap, Bridgelall**, and **You**, for the purpose of developing a personal identification system including the database to manage all the registered users and the result would have been predictable in the combination of **Yap, Kono, Bridgelall**, and **You**.

(4). As to **claim 5, Yap, Kono, Bridgelall**, and **You** disclose the limitations of **claim 2** except for the claimed limitations of the information processing apparatus further comprising network communication means which communicates with a management server via a predetermined network, the management server managing the biological identification data registered in the communication target (**Kono**: column 5 lines 15-17, lines 22-27 and FIG. 10 steps 1000-1001 and database 100) and compressed data by use of data obtained in a process up to generation of the biological identification data, with a correspondence established between the biological identification data and a compressed data (**Kono**: column 5 lines 27 – 42 and FIG. 10 steps 1002-1010), wherein: the extraction means generates the compressed data by use of data obtained in a process up to extraction of the biological data at the predetermined portion

from the biological data detected by the biological sensor; and the biological authentication means compares the compressed data generated by the extraction means with the compressed data obtained from the management server via the network communication means.

In the same art of performing personal identification, **Kono** discloses a personal identification system wherein the registered biological data is stored in the database during the registration (column 5 lines 15-17, lines 22-27 and FIG. 10 steps 1000-1001 and database 100). During the authentication process, the biological data obtained from the user using the imaging device (column 2 line 68 – column 3 lines 21, column 5 lines 14-42, FIG. 3A, FIG. 4, FIG. 7-9, FIG. 10 step 1003, and FIG. 11 steps 1004-1103) is compared to the registered biological data selected from the data (column 5 lines 17-21, lines 27-42 and FIG. 10 steps 1002-1010).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the extraction means generates the compressed data by use of data obtained in a process up to extraction of the biological data at the predetermined portion from the biological data detected by the biological sensor; and the biological authentication means compares the compressed data generated by the extraction means with the compressed data obtained from the management server via the network communication means, as taught by **Kono**, in the individual personal identification system of **Yap, Bridgelall, and You**, for the purpose of performing the biological authentication using the registered biological data stored in the database of the system with the biological obtain from user during the authentication process and the result would have been predictable in the combination of **Yap, Kono, Bridgelall, and You**.

(5). As to **claim 6, Yap, Kono, Bridgelall, and You** disclose the limitations of **claim 5**. Further, **Yap** discloses the biological data at the predetermined portion, extracted by the extraction means, with the biological identification data obtained from the communication target via the near- distance communication means (column 4 lines 38-53, column 5 line 64 – column 6 line 16, lines 45-51, column 15 lines 20-37, lines 38-52 , lines 56-65, column 16 lines 6-11, and FIG. 7) except for the claimed limitations of the information processing apparatus wherein the biological authentication means compares the compressed data generated by the extraction means with the compressed data obtained from the management server via the network communication means.

In the same art of personal authentication, **Kono** discloses the biological authentication means compares the compressed data generated by the extraction means with the compressed data obtained from the management server via the network communication means (column 2 line 68 – column 3 lines 21, column 5 lines 14-42, FIG. 3A, FIG. 4, FIG. 7-9, FIG. 10 step 1000-1001, step 1003, database 100, and FIG. 11 steps 1004-1103).

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the information processing apparatus wherein the biological authentication means compares the compressed data generated by the extraction means with the compressed data obtained from the management server via the network communication means, as taught by **Kono**, in the personal identification system of **Yap, Bridgelall, and You**, for the purpose of performing the double authentication between the card terminal user, and the registered biological data stored in the management server to improve more security for the

system and the result would have been predictable in the combination of **Yap**, **Kono**, **Bridgelall**, and **You**.

(6). As to **claim 9**, **Yap** discloses method of making an improved security identification document including contactless communication insert unit. Further, **Yap** discloses an information processing apparatus comprising:

equipment means which is equipped on a predetermined portion of a living body (column 15 lines 6-13 and FIG. 7 the document 10) and has (1) a storage (column 4 line 64 – column 5 line 6, column 12 lines 39-42 and FIG. 1 the microprocessor 14) means which stores a first biological identification data associated with the predetermined portion of the living body (column 4 lines 38-53 and column 6 lines 45-51); and (2) a communication means which is held by the equipment means and transmits the first biological identification data directly to a communication target to which the predetermined portion equipped with the equipment means is brought close (column 15 lines 6-13, column 15 lines 31-37, column 5 line 64 – column 6 line 16);

a biological authentication means which performs biological authentication (column 15 lines 56-65 and column 16 lines 6-11), based on the first biological identification data (column 4 lines 38-53 and column 6 lines 45-51) and on a second biological identification data (column 15 lines 38-52 and FIG. 7).

Except for the claimed limitations of said second biological identification data being extracted from biological information detected by a biological sensor while the communication means transmits the first biological identification data to the communication target; a network connected to the biological authentication means; and an authentication device connected to the

network that performs mutual authentication between the equipment means via the biological authentication means and a management server via the network, wherein, if mutual authentication is confirmed by the authentication device, the equipment means and the biological authentication means exchange encryption information.

As **Yap's** teaching, it is obvious that the user of the improved security identification document is using his/her hand to present the card for reading (inspected or validated proximate to or equipped on a predetermined portion of the subject's living body) and the same hand is being used for scanning the biometric identification data for verification.

In the art of performing personal identification, **Kono** discloses a personal identification system wherein the system comprises a camera having a light source used to capture the person blood vessel pattern, and the captured image is processed to identify the captured data (column 2 lines 68 – column 3 lines 21 and FIG. 11 steps 1004-1103).

In the art of performing personal identification, **Bridgelall** discloses a system/method combined biometric reader (column 3 lines 56 – column 4 lines 9, column 6 lines 33-52, and FIG. 1 the barcode scanner 102 and the laser detection device 104) and RFID circuit (FIG. 1 the RFID circuit 106) to read the information from the RFID badge and finger print for authentication (column 3 lines 40-55, column 4 lines 62 – column 5 lines 12, and column 6 lines 33-52). Further, **Bridgelall** discloses system can simultaneously process the biometric data signals and the RFID signals (abstract, column 4 lines 62 – column 5 lines 12, column 5 lines 56-62, column 6 lines 33-52, and FIG. 1).

In the same art of exchanging information between two devices, **You** discloses the known method of exchanging contents between two devices in wireless communication wherein the first

device (FIG. 1 the device A) and the second device (FIG. 1 the device B) confirm whether each of the first and second devices are authentic through the mutual authentication (FIG. 1 the mutual authentication 120). Further, **You** discloses if the mutual authentication is confirmed that both of the first and second devices are authentic, the first device and the second device exchange the key used to encrypt/decrypt the content of information during transmitting/receiving between the two devices through the session key exchange process ([0005] and FIG. 1 the session key exchange 130 and content exchange 140).

In view of the teachings by **Yap, Kono, Bridgelall**, and **You's** teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include an extraction means which extracts a second biological identification data from the biological information detected by the biological sensor, as taught by **Kono**, while the first communication means transmits the first biological information to the second communication means, as taught by **Bridgelall**, in the personal identification system of **Yap**, for the purpose of identifying the captured biological data before performing the biological authentication process in a speedy, therefore convenient manner to the user, further to include in the computer of personal identification system of **Yap, Kono, and Bridgelall** connected the network connected to retrieve biological information of the user from the database wherein the improved security identification document and computer connected to the network perform the mutual authentication before the improved security identification document and the computer of the system exchanging the encryption information for performing the biological authentication, as taught by **You**, in the personal identification system of **Yap, Kono, and Bridgelall**, for the purpose of authenticating each other between the improved security identification document and the system before the

improved security identification document transmitting the biological information to the system and the result would have been predictable in the combination of **Yap, Kono, Bridgelall, and You.**

(7). As to **claim 10, Yap, Kono, Bridgelall, and You** disclose limitations of **claim 9**. Further, **Yap** discloses the information processing apparatus further comprising voltage accumulation means which accumulates a voltage induced in response to reception of a signal supplied from the communication target (FIG. 1 the improved security identification document 10), wherein the communication means transmits the biological identification data to the communication target, using the voltage accumulated by the voltage accumulation means as an electromotive force (column 13 lines 3-25, column 15 lines 6-13, lines 21-24, and FIG. 1 the improved security identification document 10).

5. **Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Yap in view of Kono, Bridgelall, You and further in view of Endoh et al. (Endoh - US 2004/0022421) and Nick Bromer (Bromer – US 6,476,715 B1).**

As to **claim 7, Yap, Kono, Bridgelall, and You** disclose the limitations of **claim 2** except for the claimed limitations of the information processing apparatus wherein: the communication target is provided with a light source; the information processing apparatus further comprises (a) generation means which generates a flicker pattern to control a flickering state of the light source, and (b) encryption means which encrypts the flicker pattern generated by the generation means; and the biological authentication means compares the flicker pattern with a luminance pattern of the biological data, which is detected by the biological sensor through the living body brought close to the predetermined position and emitted with light

flickered in accordance with the flicker pattern from the light source in the communication target brought close to the predetermined position.

In the same art of performing the biological authentication, **Endoh** discloses a device with built-in LEDs used as the light source to capture the user blood vessel image in the authentication process ([0202] - [0213], [0215]-[0218] and FIG. 1).

In the same art of performing encrypted authentication, **Bromer** discloses land vehicle having its vehicle identification number encoded into the binary format and the flickering encoded identifier is displayed using the brake light of the vehicle (abstract, column 1 line 61 – column 2 line 4, and FIG. 2 the brake lamp 100). In addition, the detector is coupled to a database to record the vehicle identification number and detect the flickering pattern from the vehicle to perform the authentication to determine whether the vehicle is stolen or wanted (abstract, column 2 lines 5-13, lines 20-26, lines 33-44, and FIG. 2 the detector 200).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the information processing apparatus wherein: the communication target is provided with a light source; the information processing apparatus further comprises (a) generation means which generates a flicker pattern to control a flickering state of the light source, and (b) encryption means which encrypts the flicker pattern generated by the generation means; and the biological authentication means compares the flicker pattern with a luminance pattern of the biological data, which is detected by the biological sensor through the living body brought close to the predetermined position and emitted with light flickered in accordance with the flicker pattern from the light source in the communication target brought close to the predetermined position, as taught by **Endoh** and **Bromer**, in the personal

identification of **Yap, Kono, Bridgelall, and You**, for the purpose of generating the biological data as the flickering patter using the light source and performing the biological authentication between the communication target and the authentication device and the result would have been predictable in the combination of **Yap, Kono, Bridgelall, You, Endoh and Bromer**.

6. **Claim 11 is rejected under 35 USC 103(a) as being unpatentable over Yap in view of Kono, Bridgelall, You and further in view of Endoh and Jerome H. Lemelson (Lemelson - US 4,189,712).**

As to **claim 11, Yap, Kono, Bridgelall, and You** disclose the limitations of **claim 9** except for the claimed limitations of the information processing apparatus wherein the equipment means is constituted by (a) a circular ring portion, and (b) a light source which is provided on the ring portion and emits imaging light on the identification target at the predetermined portion; and the imaging light is guided to an imaging element provided on the communication target, through the living body brought close to the communication target.

In the same art of performing personal identification, **Endoh** discloses a cell phone having the light source for emitting light and photographing the user blood vessel by the reflected light of the user palm of the hand ([0202]-[0204] and FIG. 12).

In the same art of performing authentication, **Lemelson** discloses a switch and lock activating system and method. Further, **Lemelson** discloses the finger ring that contains the security code to operate the activating system (column 3 lines 23-40, column 4 lines 33-68, and column 5 lines 29-68).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include in the personal identification system of **Yap, Kono, Bridgelall,**

and **You**, the information processing wherein the equipment means is constituted by (a) a circular ring portion, and (b) a light source which is provided on the ring portion and emits imaging light on the identification target at the predetermined portion; and the imaging light is guided to an imaging element provided on the communication target, through the living body brought close to the communication target, as taught by **Endoh** and **Lemelson**, for the purpose of providing variations of the personal identification system and the result would have been predictable in the combination of **Yap**, **Kono**, **Bridgelall**, **You**, **Endoh** and **Lemelson**.

7. **Claim 12 is rejected under 35 USC 103(a) as being unpatentable over Yap in view of Kono, Bridgelall, You and further in view of Bromer.**

As to **claim 12**, **Yap**, **Kono**, **Bridgelall**, and **You** disclose the limitations of **claim 9** except for the claimed limitations of the information processing apparatus wherein: the imaging light is flickered in accordance with a flicker pattern supplied from the communication target; and the flicker pattern is compared with a luminance pattern of images sequentially generated on the basis of the imaging light.

In the same art of performing encrypted authentication, **Bromer** discloses land vehicle having its vehicle identification number encoded into the binary format and the flickering encoded identifier is displayed using the brake light of the vehicle (abstract, column 1 line 61 – column 2 line 4, and FIG. 2 the brake lamp 100). In addition, the detector is coupled to a database to record the vehicle identification number and detect the flickering pattern from the vehicle to perform the authentication to determine whether the vehicle is stolen or wanted (abstract, column 2 lines 5-13, lines 20-26, lines 33-44, and FIG. 2 the detector 200).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the information processing apparatus according to claim 9, wherein: the imaging light is flickered in accordance with a flicker pattern supplied from the communication target; and the flicker pattern is compared with a luminance pattern of images sequentially generated on the basis of the imaging light, as taught by **Bromer**, in the personal identification system of **Yap, Kono, Bridgelall, and You**, for the purpose of performing the biological authentication using the blood vessel pattern generated by the light source and the luminance pattern detected by the sensor to determine whether the user is authenticated to use the service and the result would have been predictable in the combination of **Yap, Kono, Bridgelall, You, and Bromer**.

Citation of Pertinent Art

8. The prior are made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Pintsov et al., US 2002/0120668 A1, discloses mail processing system with unique mailpiece authorization assigned in advance of mailpieces entering carrier service mail processing stream.

b. Asano et al., US 2002/0154779 A1, discloses data recording/reproducing device and saved data processing method, and program providing medium.

c. Kawamoto, US 2002/0166047 A1, discloses method and apparatus for providing information for decrypting content, and program executed on information processor.

d. Audebert et al., US 2003/0145203 A1, discloses system and method for performing mutual authentication between security tokens.

e. Ishii et al., US 2003/0228886 A1, discloses electronic value data communication method, communication system, IC card, portable terminal, and communication.

f. Sakamura et al., US 2004/0059685 A1, discloses IC card and authentication method in electronic ticket distribution system.

g. Oba et al., US 2004/0259499 A1, discloses communication system and method.

h. Kudo et al., US 2004/0268131 A1, discloses content transmitting device, content receiving device, and content transmitting method.

i. Zai et al., US 2005/0061875 A1, discloses method and apparatus for secure RFID system.

j. Togawa, US 2005/0081035 A1, discloses information processing apparatus and method, and storage medium.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUANG PHAM whose telephone number is (571)-270-3668. The examiner can normally be reached on Monday - Thursday 9:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BENJAMIN LEE can be reached on (571)-272-2963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/QUANG PHAM/
Examiner, Art Unit 2612

/BENJAMIN C. LEE/
Supervisory Patent Examiner, Art Unit 2612